

## **DEPARTMENT OF NATURAL RESOURCES**

### **POSITION DESCRIPTION**

**Classification Title:** Engineer Supervisor

**Working Title:** CAFO Engineer Supervisor

#### **Position Summary:**

This position has two parts. The first is the responsibility for managing the Watershed subprogram's Concentrated Animal Feeding Operations (CAFO) discharge permit engineering review process. This position is responsible for the establishment of policy, standards and procedures to ensure statewide consistency of CAFO plan review and other engineering efforts. This position has delegated signature authority for approval of plans and specifications for CAFO production area treatment and conveyance systems that are built in Wisconsin. This position acts as the engineer-in-charge for CAFO activities in the statewide Watershed program, requiring a Wisconsin Professional Engineering license in full.

The other half of this position is to serve as an agricultural engineer for the Ag Runoff Section in the Bureau of Watershed Management. This position's secondary function is to review plans and specifications for construction projects at Concentrated Animal Feeding Operations (CAFOs) for conformance with technical standards and Department rules and regulations. However, this position will also evaluate existing, proposed and emerging water quality protection measures for livestock operations and other agricultural facilities on a statewide basis.

The position conducts outreach efforts with both internal and external audiences pertaining to engineering aspects of current rules and standards that apply to agriculture and provides advice on engineering principles that relate to agricultural facilities.

#### **Scope of Authority:**

This position is supervised by the Agricultural Runoff Section Chief, Central Office, in the External Services Division, Watershed Management Program. This position is supervisory.

**Location, Geographic Scope, and Travel Requirements of Position:** This position will be in Central Office – Madison and will have responsibilities throughout the state. This position will require occasional statewide travel and overnight stays for meetings, trainings, site visits or to provide program implementation support, and may require minimal out-of-state travel. Telework may be available.

| <b>Time %</b> | <b>Goal and Worker Activities</b> |
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|-----|---|
| 35% | A. ADMINISTER THE CAFO ENGINEERING PLAN REVIEW ACTIVITIES   |
|     | A.1. Serve as the statewide engineering authority on the installation of conveyances and treatment systems for CAFO production areas.   |
|     | A.2. Maintain professional engineering certification to serve as statewide engineer in charge of the review and approval of engineering evaluations and plans that are required by WPDES permits. |

- A.3. Establish engineering principles and program policy, processes and strategies for consistent implementation of activities associated with the review of engineering plans and specifications for CAFO facilities under s. 281.41, Wis Stats., and chs. NR 243 and NR 151.
- A.4. Monitor and assess implementation and ensure consistent application statewide based on sound engineering principles. Direct section engineering staff, including other registered professional engineers, in the development of program requirements in the state consistent with federal and state statutes.
- A.5. Direct and provide guidance to staff on engineering plan review program activities, coordinated section objective setting, work planning, and budgeting and evaluate implementation status, accomplishments, and consistency.
- A.6. Recommend and promote establishment of administrative codes through administrative channels for adoption by the Natural Resources Board.
- A.7. Assure plan review policies and guidance are developed in accordance with sound engineering and scientific principles and in cooperation and consultations with other government agencies, environmental groups, the regulated community, and other interested parties. Promote the importance of plan review program activities to all interested parties in the state including CAFO engineering contacts through appearances at conferences, seminars, and appropriate meetings.
- A.8. Resolve conflicts between parties whenever possible and recommend actions for resolving disputes at higher administrative levels.

15%

**B. SERVE AS AN ENGINEERING SUPERVISOR OF SECTION ENGINEERING PERSONNEL AND TEAM MANAGEMENT ACTIVITIES.**

- B.1. Supervise, assist, train, hire, review, and coach section engineering staff and team members. Establish employee performance objectives and work plans; monitor work performance and expected accomplishments of section engineering personnel.
- B.2. Recommend or initiate appropriate disciplinary action when performance or behavior is below acceptable standards or conduct conflicts with policy, accepted procedure, work rules, or law.
- B.3. Motivate and challenge employees.

- B.4. Utilize proper recruitment procedures and tools to attract the best qualified job applicants. Implement steps to recruit, employ, advance, and retain staff in permanent, project, and limited term positions. Implement and provide information on Affirmative Action policies and procedures, agency goals, harassment, and discrimination policies, training, and advancement opportunities to all supervised employees.

30%

C. SERVE AS AN AGRICULTURAL ENGINEER FOR THE BUREAU OF WATERSHED MANAGEMENT TO EVALUATE EXISTING, PROPOSED AND EMERGING AGRICULTURAL STRUCTURES, FACILITIES AND PRACTICES FOR PURPOSES OF PROTECTION OF WATER QUALITY.

- C.1. Evaluate effectiveness of existing agricultural best management practices, treatment systems, runoff control systems, disposal facilities and storage practices for purposes of assuring statewide consistency and compliance with applicable administrative codes, statutes, Department procedures, and Natural Resources Conservation Service standards.
- C.2. Review agricultural engineering plans and specifications, including the most complex proposals and prepare detailed and clear engineering approvals for proposed agricultural best management practices, treatment systems, runoff control systems, disposal facilities and storage practices for purposes of assuring statewide consistency and compliance with applicable WPDES permits, administrative codes, statutes and Department procedures, Natural Resources Conservation Service standards, and ASTM standards.
- C.3. Evaluate effectiveness and technical merit of emerging agricultural best management practices, including advanced treatment, infiltration systems, anaerobic digestion systems, feed storage and feed runoff/leachate collections systems, regional storage and treatment systems, composting systems and other technologies for purposes of assuring statewide consistency and compliance with applicable administrative codes, statutes, Department procedures, and applicable standards as listed above.
- Provide agricultural engineering advice and consultation to the Bureau
- C.4. of Law Enforcement, Bureau of Legal Services, the Division of Environmental Management and other Department staff on cross-media environmental issues and natural resource issues.

- 10%      D.      SERVE AS AN ENGINEERING STAFF CONTACT ON TECHNICAL STANDARD TEAMS.
- D.1.    Serve as the Department representative on agricultural technical teams as convened by SOC to revise and develop technical standards for multi-agency and multi-program implementation.
- D.2.    Develop and promote interagency cooperation among local, federal and other state agencies for purposes of development of new and revised technical standards.
- 5%        E.        PARTICIPATE IN THE DEPARTMENT'S OUTREACH EFFORTS WITH BOTH INTERNAL AND EXTERNAL AUDIENCES PERTAINING TO ENGINEERING ASPECTS OF AGRICULTURAL RULES AND STANDARDS RELATED TO WATER QUALITY PROTECTION.
- E.1.    Consult and advise agricultural runoff staff and other field staff, other agencies and consultants on engineering aspects of agricultural best management practices for pollution abatement.
- E.2.    On a statewide basis and in response to program needs, provide training to Central Office and Regional staff, county Land Conservation Department staff, consultants and others on applicability and implementation of technical and engineering aspects of best management practices, rules and standards that relate to agriculture.
- E.3.    Support the development and implementation of agricultural performance standards for purposes of water quality protection.
- E.4.    Lead the rule revision process for chs.NR 243 and/or NR 151 to address engineering aspects of the rules.
- 5%        F.        CONDUCT OTHER AGRICULTURAL RUNOFF MANAGEMENT PRACTICES SECTION ACTIVITIES WITH ENGINEERING EMPHASIS.
- F.1.    Coordinate with state, federal, local, public and private sector agencies and groups as needed.
- F.2.    Represent the Department in local, state, regional, or work groups developing engineering and technical policies related to complex agricultural runoff management problems.
- F.3.    Serve on section, bureau, division, and department teams and work groups as necessary.
- F.4.    Perform other duties as required by the supervisor.

## **SPECIAL REQUIREMENTS**

1. Ability to maintain a current Wisconsin Professional Engineer License.
2. Ability to travel as required for the position including holding a current Wisconsin Driver's License.

## **KNOWLEDGE, SKILLS AND ABILITIES**

1. Knowledge of management principles and practices to include supervision, budget management, leadership, and coaching and mentoring.
2. Extensive knowledge of policy development, implementation, management and evaluation and state administrative rule development and procedures.
3. Extensive knowledge of state and federal water quality protection policies, regulations and statutes, including the federal Clean Water Act, NPDES/WPDES permits, and plan review.
4. Considerable knowledge and experience with team dynamics, including establishing teams and producing products through teams.
5. Considerable knowledge of state and applicable federal information technology systems used for water quality protection principles.
6. Working knowledge of federal, state and department budget processes and procedures; and fiscal controls, management methods and techniques.
7. Considerable knowledge of agricultural or nonpoint source pollutants and how their characteristics affect water resources.
8. Knowledge of agricultural or storm water technical standards and best management practices and skill in their application to achieve pollutant reduction goals.
9. Knowledge and skill in engineering principles related to the design of treatment systems including containment systems, concrete structures, soil permeability and compatibility and pipe systems.
10. Knowledge and skill in project management in a lead role with direct experience in initiating and managing projects with minimal supervision.
11. Basic knowledge of hydrology, hydrogeology and hydraulics.
12. Basic knowledge of surface runoff computer models and spreadsheets.
13. Skill in presenting complex technical information clearly and concisely in a variety of oral and written formats.
14. Skill in effectively analyzing and evaluating issues and programs.
15. Skill in oral and written communications.
16. Basic knowledge of farm operations.
17. Skill in the use of Personal computers with an emphasis on use of the Microsoft Office Suite (i.e., MS-Word, MS-Excel, MS-Project, MS-PowerPoint).

## **PHYSICAL REQUIREMENTS & ENVIRONMENTAL FACTORS:**

**Physical Factors:** Physical requirements include presenting to groups and sitting for long periods of time. Must be able to travel to other work locations as required where there may be a need to walk

around on farms and uneven ground. Sedentary work (exerting up to 10 pounds of force occasionally and/or a negligible amount of force) for 85% of the time.

**Environmental Factors:** This position will spend approximately 85% of time indoors in an office setting. This position will on occasion spend more than one hour outdoors in weather that can be cold or hot and wet.

**Equipment Used:** Office equipment including telephone, computer hardware and software. Field equipment for site reviews, including digital camera, GPS unit, soil boring instruments and shovels.

**Telework Evaluation:** Telework may be available for this position upon successful completion of the probationary period.